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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,893	11/06/2001	Edward E. Kelley	FIS920010167	5692

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EXAMINER

ABRISHAMKAR, KAVEH

ART UNIT PAPER NUMBER

2131

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/992,893

Applicant(s)

KELLEY ET AL.

Examiner

Kaveh Abrishamkar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/06/2001</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to the communication filed on November 6, 2001. Claims 1-20 were originally received for consideration. No preliminary amendments for the claims were filed. Claims 1-20 are currently being considered.

#### ***Information Disclosure Statement***

2. An initialed and dated copy of the Applicant's IDS form 1449, received on November 6, 2001, is attached to this Office action.

#### ***Claim Objections***

3. Claims 10 and 18 are objected to because of the following informalities: The final limitation of the claims should be preceded by an "and." Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The term "large" in claims 3 and 12 is a relative term which renders the claim indefinite. The term "large" is not defined by the claim, the specification does not

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provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The claim limitations state the scan chains are sufficiently long in order to contain a security id code of "large magnitude." This is indefinite as it is unclear what the upper limit of the size of the security id code is supposed to be.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6, 8-14, and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Chu (U.S. Patent No. 6,321,335).

Regarding claim 1, Chu discloses:

A method for creating integrated security within electronic devices, comprising the steps of:

concatenating one or more scan chains to create a storage element (column 9 lines 11-33);

connecting the storage element to a comparator within an electronic circuit wherein an output of the comparator enables a system component (column 9 lines 11-33);

receiving a password from a user which becomes the system security id code (column 3 lines 13-25, column 9 lines 11-33); and

configuring one or more said scan chains to customize the storage element which represents said security id code by blowing integrated electronic fuses (column 9 lines 11-33).

Claim 2 is rejected as applied above in rejecting claim 1. Furthermore, Chu discloses:

A method according to claim 1, wherein the scan chains are composed of latches or registers and are accessible externally via one or more serial inputs or outputs (Figure 5 item 513, column 8 lines 1-15).

Claim 3 is rejected as applied above in rejecting claim 1. Furthermore, Chu discloses:

A method according to claim 1, wherein the scan chains are sufficiently long in order to represent passwords of variable lengths and to contain a security id code of large magnitude (column 9 lines 11-33).

Claim 4 is rejected as applied above in rejecting claim 1. Furthermore, Chu discloses:

A method according to claim 1, wherein the security id code is not alterable once blown and cannot be read from the storage elements after the security code is blown

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except by the comparator (column 9 lines 15-24).

Claim 5 is rejected as applied above in rejecting claim 1. Furthermore, Chu discloses:

A method according to claim 1, wherein the electronic fuses are blown if the current security code id is provided to enable the securing process to occur (column 9 lines 11-33).

Claim 6 is rejected as applied above in rejecting claim 1. Furthermore, Chu discloses:

A method according to claim 1, wherein the password is compared by the comparator to contents of the storage element (column 9 lines 11-33).

Claim 8 is rejected as applied above in rejecting claim 1. Furthermore, Chu discloses:

A method according to claim 1, wherein the storage element is a plurality of storage elements (column 9 lines 11-33).

Claim 9 is rejected as applied above in rejecting claim 1. Furthermore, Chu discloses:

A method according to claim 1, wherein the comparator is a plurality of comparators (column 9 lines 11-33).

Regarding claim 10, Chu discloses:

A method for creating integrated security within electronic devices, comprising the steps of:

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concatenating one or more scan chains to create a storage element said storage element configured by integrated electronic fuses to represent a system security id code (column 9 lines 11-33);

connecting the memory element to a comparator within an electronic circuit wherein the output of the comparator enables a system component (column 9 lines 11-33);

receiving a password from a user (column 3 lines 13-25, column 9 lines 11-33);

providing the password to the comparator (column 10 line 58 – column 11 line 15); and

comparing the password to the system security id code wherein the comparator output enables a system component (column 10 line 58 – column 11 line 15).

Claim 11 is rejected as applied above in rejecting claim 10. Furthermore, Chu discloses:

A method according to claim 10, wherein the scan chains are composed of latches or registers and is accessible externally via one or more serial inputs or outputs (Figure 5 item 513, column 8 lines 1-15).

Claim 12 is rejected as applied above in rejecting claim 10. Furthermore, Chu discloses:

A method according to claim 10, wherein the scan chains are sufficiently long in order to represent passwords of variable lengths and to contain a security id code of

large magnitude (column 9 lines 11-33).

Claim 13 is rejected as applied above in rejecting claim 10. Furthermore, Chu discloses:

A method according to claim 10, wherein the security id code is not alterable and cannot be read from the storage elements except by the comparator (column 9 lines 15-24).

Claim 14 is rejected as applied above in rejecting claim 1. Furthermore, Chu discloses:

A method according to claim 10, wherein the password is compared by the comparator to the contents of the storage element (column 9 lines 11-33).

Claim 16 is rejected as applied above in rejecting claim 10. Furthermore, Chu discloses:

A method according to claim 10, wherein the storage elements are a plurality of storage elements (column 9 lines 11-33).

Claim 17 is rejected as applied above in rejecting claim 10. Furthermore, Chu discloses:

A method according to claim 10, wherein the comparator is a plurality of comparators (column 9 lines 11-33).

Regarding claim 18, Chu discloses:

An integrated security device for providing security within electronic devices comprising:

a scan chain which is configured using electronic fuses to represent a system security id code (column 9 lines 11-33);

a comparator that compares a password entered by a system user to the system security id code (column 10 line 58 – column 11 line 15).;

an output of the comparator which can enable a electronic component or electronic device (column 10 line 58 – column 11 line 15).

Claim 19 is rejected as applied above in rejecting claim 18. Furthermore, Chu discloses:

An integrated security device as recited in claim 18 wherein the scan chain is a plurality of scan chains (column 9 lines 11-33).

Claim 20 is rejected as applied above in rejecting claim 18. Furthermore, Chu discloses:

An integrated security device as recited in claim 18 wherein the comparator is a plurality of comparators (column 9 lines 11-33).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu (U.S. Patent No. 6,321,335).

Claim 7 is rejected as applied above in rejecting claim 1. Chu does not explicitly disclose validating the password for size limits and character content. However, Chu does disclose the user inputting the password which is permanently burned into memory using fuses. It was well-known in the art at the time the invention was made that password input schemes have length limitations, and when a user inputs a password longer than the acceptable password, a warning is flashed with the minimum and maximum password lengths. Furthermore, it was well-known in that art at the time the invention was made, that password input systems may require a certain string of numbers and letters, as in systems where require a combination of letters and numbers to stymie possible hackers from discovering the password. Using the two above well-known requirements in the password art in conjunction with the disclosure of Chu would provide a more secure and memory efficient password system, in which the password is constrained to a certain length and cannot occupy too much memory, and further is subject to character content requirements which allow the password to be more secure and more resistant to hackers. Therefore, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to apply a character content requirement and a length constraint to the password input of Chu to preserve memory and to make the password more resistant to hackers.

Claim 15 is rejected as applied above in rejecting claim 10. Chu does not explicitly disclose validating the password for size limits and character content. However, Chu does disclose the user inputting the password which is permanently burned into memory using fuses. It was well-known in the art at the time the invention was made that password input schemes have length limitations, and when a user inputs a password longer than the acceptable password, a warning is flashed with the minimum and maximum password lengths. Furthermore, it was well-known in that art at the time the invention was made, that password input systems may require a certain string of numbers and letters, as in systems where require a combination of letters and numbers to stymie possible hackers from discovering the password. Using the two above well-known requirements in the password art in conjunction with the disclosure of Chu would provide a more secure and memory efficient password system, in which the password is constrained to a certain length and cannot occupy too much memory, and further is subject to character content requirements which allow the password to be more secure and more resistant to hackers. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a character content requirement and a length constraint to the password input of Chu to preserve memory and to make the password more resistant to hackers.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Abrishamkar whose telephone number is 571-272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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